

- Hungar *to stay*, chap. 73. Stammering, chap. 64
 Jaundies *yellow*, chap. 2, 5, 6, Teeth *to fasten*, chap. 52, [and 7
 [30 others] 'others]
 Memory *to help*, chap. 5, 8, 7, Teeth *to breede*, chap. 55.
 22 [and 5 others] Wearineſſe, chap. 286, 343.
 Neck *pained, and creek in it*, chap.
 44, 273, 286

SHORTER NOTES

NOTES ON *Chrysobalanus Icaco* L.—A large portion of the sand dunes between the beach and Biscayne Bay opposite Miami, Florida, is covered by a growth of the Cocoa Plum. The plant there grows in approximately circular or somewhat irregular patches, the stems and branches radiately arranged and partially prostrate and partially curving upward. The flowers and fruits are borne mainly at the circumference of the patches, or near it. The plants produce fruits of three colors, namely yellow, purple, and red. The color of the fruits is always decided, and a given patch, so far as I have observed, produces but one color of fruit, each patch invariably bearing either yellow, purple, or red fruits. Except for this color-difference and a relative difference in the size of the fruits, the yellow the largest and the red the smallest, the plants appear to be identical. J. K. SMALL

A NEW SPECIES OF *Proserpinaca*.—So peculiar are most of the plants of the New Jersey pine-barrens and so local are many of them that novelties are to be expected; but I must confess I was somewhat surprised to find that a large amount of material collected by me as *Proserpinaca palustris* L. was not that species, but a plant quite intermediate in character between it and *Proserpinaca pectinata* Lam.

As is well known, the first-named species has those emerged leaves which bear fruit in their axils oblong-lanceolate and merely serrate or serrulate, and the submerged leaves are pectinate or pectinate-pinnatifid; in the second named species all the leaves are strongly pectinate-pinnatifid, being divided to the rachis. The pine-barren plant has all the emerged leaves pectinate with broad margined rachis, the submerged leaves being pectinate-pinnatifid. The emerged leaves are in fact exactly half way between those of the two species above referred to.

The plant seems distinct and may be designated and described as

Proserpinaca intermedia

Glabrous, the stems decumbent at base, rooting, about 3 dm. high, simple or somewhat branched. Leaves of two kinds; blades of submerged ones pectinate-pinnatifid, divided to the rachis; blades of emersed ones oblong-lanceolate, pectinate, the stiff segments entire, acute, the central part of blade one-third of its width; flowers sessile in axils of emersed leaves, one to few together; sepals triangular, acute, convergent; fruit 4 mm. long and about as wide, sharply angled, the faces flat or slightly concave, wrinkled or rugose.

Specimens examined:

NEW JERSEY. Boggy soil along Pennsylvania right of way about half way between Barnegat Pier and Island Heights Junction, Ocean County, *Mackenzie* 2890, Sept. 1907 (type in Herb. K. K. Mackenzie; duplicates will be deposited in Herb. N. Y. Bot. Garden and Gray Herbarium);

GEORGIA. Wet pine barrens east of Douglass, Coffee County, *Harper* 1527, July 19, 1902; in small branch swamps in pine-barrens near Fitzgerald, Irwin County, *Harper* 2210, May 18, 1904.

KENNETH K. MACKENZIE

REVIEWS.

Osborne's Vegetable Proteins*

Dr. Osborne has done a great service to chemists and to those interested in the chemistry of plants by the publication of this monograph upon the proteins of vegetable origin. This subject has been his life-work and surely there is no one, here or abroad, better qualified to write upon it. The proof of this is the fact that the book is largely an outline of his own work and conclusions. Dr. Osborne treats first of the general characteristics of these proteins, the manner of preparation, their general physical and chemical properties, their decomposition products, and their classification. The last chapter is exceedingly interesting,

*Osborne, Thomas B. *The Vegetable Proteins*. Pp. 125. Longmans, Green, & Co., London and New York. 1909.